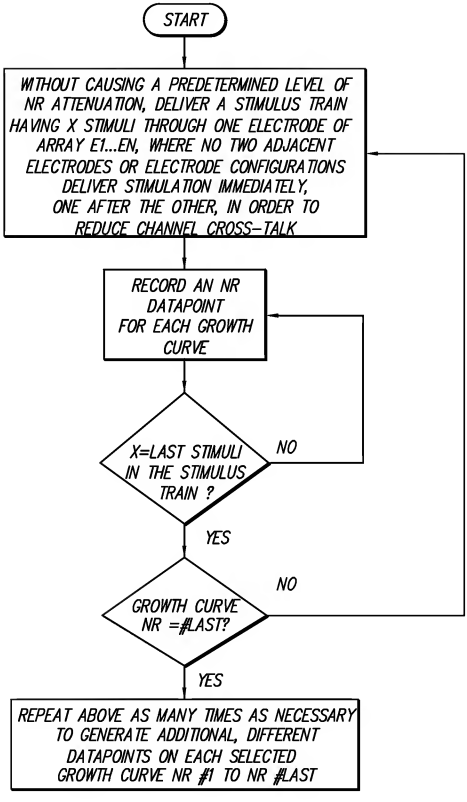
START
WITHOUT CAUSING A PREDETERMINED LEVEL OF NR ATTENUATION, DELIVER A STIMULUS TRAIN HAVING X STIMULI THROUGH ONE ELECTRODE OF ARRAY ET...EN, WHERE NO TWO ADJACENT ELECTRODES OR ELECTRODE CONFIGURATIONS DELIVER STIMULATION IMMEDIATELY, ONE AFTER THE OTHER, IN ORDER TO REDUCE CHANNEL CROSS-TALK
RECORD AN NR DATAPOINT FOR EACH GROWTH CURVE
X=LAST STIMULI IN THE STIMULUS TRAIN ?
NO
YES
GROWTH CURVE NR =#LAST?
NO
YES
REPEAT ABOVE AS MANY TIMES AS NECESSARY TO GENERATE ADDITIONAL, DIFFERENT DATAPOINTS ON EACH SELECTED GROWTH CURVE NR #1 TO NR #LAST

FIG. 4

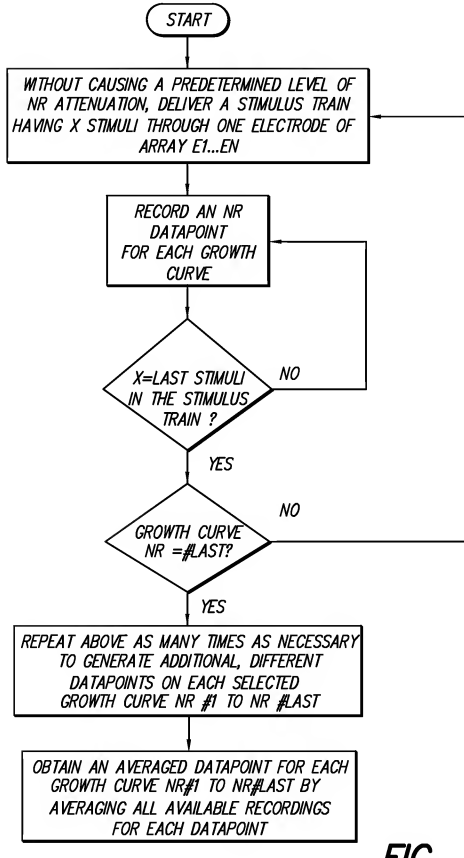
START
WITHOUT CAUSING A PREDETERMINED LEVEL OF NR ATTENUATION, DELIVER A STIMULUS TRAIN HAVING X STIMULI THROUGH ONE ELECTRODE OF ARRAY E1...EN
RECORD AN NR DATAPOINT FOR EACH GROWTH CURVE
X=LAST STIMULI IN THE STIMULUS TRAIN ?
NO
YES
GROWTH CURVE NR =#LAST?
NO
YES
REPEAT ABOVE AS MANY TIMES AS NECESSARY TO GENERATE ADDITIONAL, DIFFERENT DATAPOINTS ON EACH SELECTED GROWTH CURVE NR #1 TO NR #LAST
OBTAIN AN AVERAGED DATAPOINT FOR EACH GROWTH CURVE NR#1 TO NR#LAST BY AVERAGING ALL AVAILABLE RECORDINGS FOR EACH DATAPOINT

FIG. 5

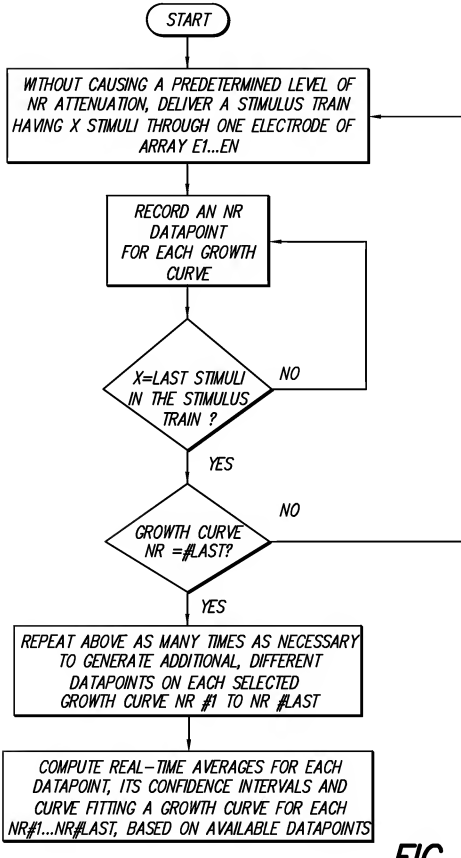
START
WITHOUT CAUSING A PREDETERMINED LEVEL OF NR ATTENUATION, DELIVER A STIMULUS TRAIN HAVING X STIMULI THROUGH ONE ELECTRODE OF ARRAY E1...EN
RECORD AN NR DATAPOINT FOR EACH GROWTH CURVE
X=LAST STIMULI IN THE STIMULUS TRAIN ?
NO
YES
GROWTH CURVE NR =#LAST?
NO
YES
REPEAT ABOVE AS MANY TIMES AS NECESSARY TO GENERATE ADDITIONAL, DIFFERENT DATAPOINTS ON EACH SELECTED GROWTH CURVE NR #1 TO NR #LAST
COMPUTE REAL-TIME AVERAGES FOR EACH DATAPOINT, ITS CONFIDENCE INTERVALS AND CURVE FITTING A GROWTH CURVE FOR EACH NR#1...NR#LAST, BASED ON AVAILABLE DATAPOINTS

FIG. 6

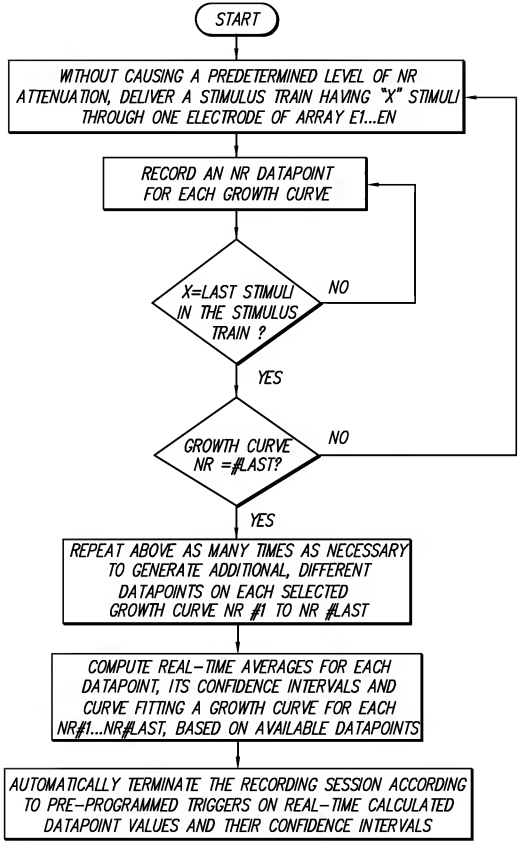
START
WITHOUT CAUSING A PREDETERMINED LEVEL OF NR ATTENUATION, DELIVER A STIMULUS TRAIN HAVING "X" STIMULI THROUGH ONE ELECTRODE OF ARRAY E1...EN
RECORD AN NR DATAPOINT FOR EACH GROWTH CURVE
X=LAST STIMULI IN THE STIMULUS TRAIN ?
NO
YES
GROWTH CURVE NR =#LAST?
NO
YES
REPEAT ABOVE AS MANY TIMES AS NECESSARY TO GENERATE ADDITIONAL, DIFFERENT DATAPOINTS ON EACH SELECTED GROWTH CURVE NR #1 TO NR #LAST
COMPUTE REAL-TIME AVERAGES FOR EACH DATAPOINT, ITS CONFIDENCE INTERVALS AND CURVE FITTING A GROWTH CURVE FOR EACH NR#1...NR#LAST, BASED ON AVAILABLE DATAPOINTS
AUTOMATICALLY TERMINATE THE RECORDING SESSION ACCORDING TO PRE-PROGRAMMED TRIGGERS ON REAL-TIME CALCULATED DATAPOINT VALUES AND THEIR CONFIDENCE INTERVALS

FIG. 7

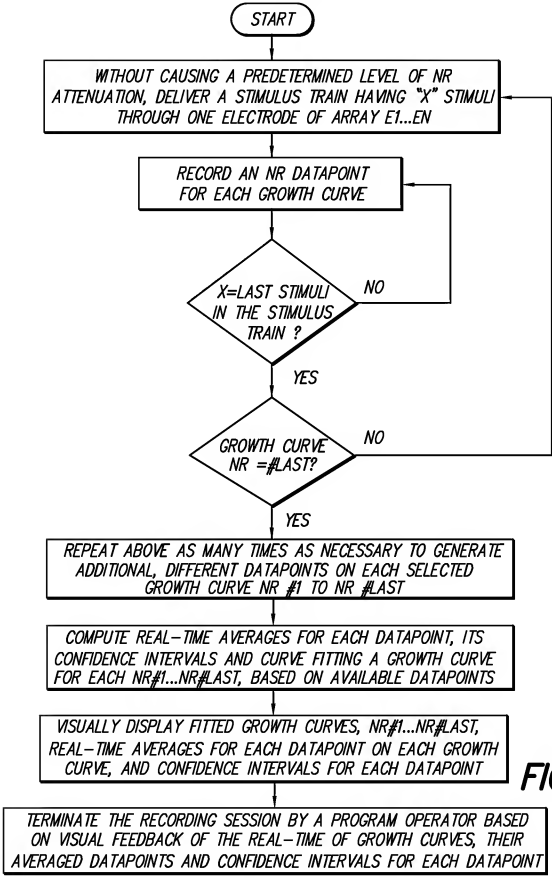
START
WITHOUT CAUSING A PREDETERMINED LEVEL OF NR ATTENUATION, DELIVER A STIMULUS TRAIN HAVING "X" STIMULI THROUGH ONE ELECTRODE OF ARRAY E1...EN
RECORD AN NR DATAPOINT FOR EACH GROWTH CURVE
X=LAST STIMULI IN THE STIMULUS TRAIN ?
NO
YES
GROWTH CURVE NR =#LAST?
NO
YES
REPEAT ABOVE AS MANY TIMES AS NECESSARY TO GENERATE ADDITIONAL, DIFFERENT DATAPOINTS ON EACH SELECTED GROWTH CURVE NR #1 TO NR #LAST
COMPUTE REAL-TIME AVERAGES FOR EACH DATAPOINT, ITS CONFIDENCE INTERVALS AND CURVE FITTING A GROWTH CURVE FOR EACH NR#1...NR#LAST, BASED ON AVAILABLE DATAPOINTS
VISUALLY DISPLAY FITTED GROWTH CURVES, NR#1...NR#LAST, REAL-TIME AVERAGES FOR EACH DATAPOINT ON EACH GROWTH CURVE, AND CONFIDENCE INTERVALS FOR EACH DATAPOINT
TERMINATE THE RECORDING SESSION BY A PROGRAM OPERATOR BASED ON VISUAL FEEDBACK OF THE REAL-TIME OF GROWTH CURVES, THEIR AVERAGED DATAPOINTS AND CONFIDENCE INTERVALS FOR EACH DATAPOINT

FIG. 8

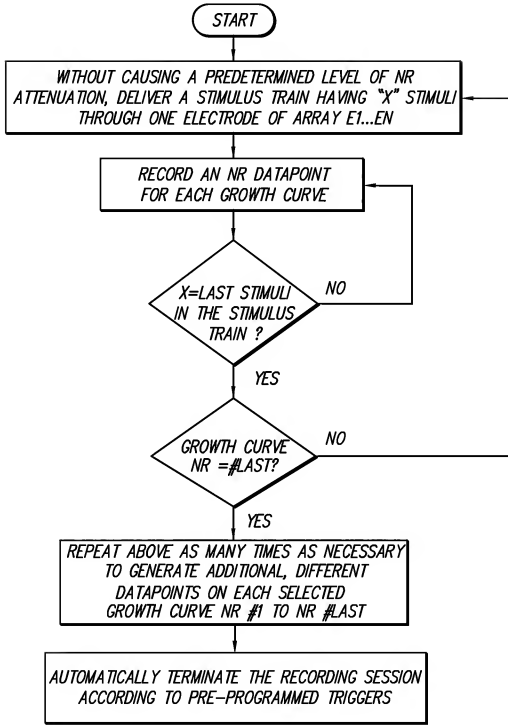
START
WITHOUT CAUSING A PREDETERMINED LEVEL OF NR ATTENUATION, DELIVER A STIMULUS TRAIN HAVING "X" STIMULI THROUGH ONE ELECTRODE OF ARRAY E1...EN
RECORD AN NR DATAPOINT FOR EACH GROWTH CURVE
X=LAST STIMULI IN THE STIMULUS TRAIN ?
NO
YES
GROWTH CURVE NR =#LAST?
NO
YES
REPEAT ABOVE AS MANY TIMES AS NECESSARY TO GENERATE ADDITIONAL, DIFFERENT DATAPOINTS ON EACH SELECTED GROWTH CURVE NR #1 TO NR #LAST
AUTOMATICALLY TERMINATE THE RECORDING SESSION ACCORDING TO PRE-PROGRAMMED TRIGGERS

FIG. 9

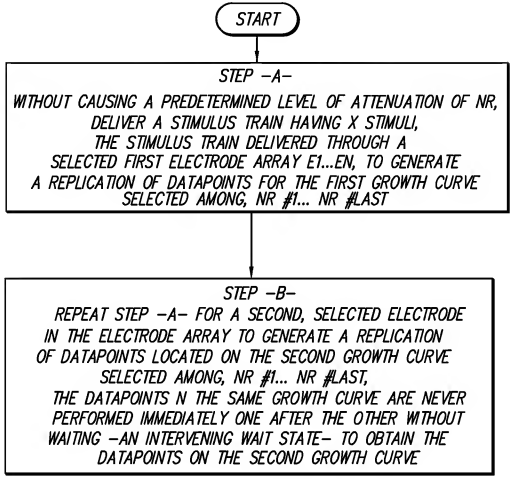
START
STEP –A–
WITHOUT CAUSING A PREDETERMINED LEVEL OF ATTENUATION OF NR, DELIVER A STIMULUS TRAIN HAVING X STIMULI, THE STIMULUS TRAIN DELIVERED THROUGH A SELECTED FIRST ELECTRODE ARRAY E1...EN, TO GENERATE A REPLICATION OF DATAPOINTS FOR THE FIRST GROWTH CURVE SELECTED AMONG, NR #1... NR #LAST
STEP –B–
REPEAT STEP –A– FOR A SECOND, SELECTED ELECTRODE IN THE ELECTRODE ARRAY TO GENERATE A REPLICATION OF DATAPOINTS LOCATED ON THE SECOND GROWTH CURVE SELECTED AMONG, NR #1... NR #LAST, THE DATAPOINTS N THE SAME GROWTH CURVE ARE NEVER PERFORMED IMMEDIATELY ONE AFTER THE OTHER WITHOUT WAITING –AN INTERVENING WAIT STATE– TO OBTAIN THE DATAPOINTS ON THE SECOND GROWTH CURVE

FIG. 10